Methods for the future study of "epidemic hysteria" are discussed, and the term is defined here. Epidemic hysteria is a phenomenon which awaits expanded investigation with a need for stress being placed on its multicausal aspects. The importance of the role of public health personnel in such studies is pointed out.

# METHODOLOGICAL CONSIDERATIONS AND RESEARCH NEEDS IN THE STUDY OF EPIDEMIC HYSTERIA

Theodore I. Friedman, M.A.

This paper is intended to outline basic methods and means by which more effective ways of investigating epidemic hysteria (and related group pathologies) may be developed and utilized.

Epidemic hysteria is defined as a conversion reaction involving two or more persons in social contiguity. The conversion may be diffuse (decreased state of awareness or pronounced general anxiety), or specific (affected limbs, organs, or sensory pathways), or both diffuse and specific.

While it is clear that the phenomenon of epidemic hysteria is presently mainly of interest to psychopathologists, epidemiologists, and sociologists, it is almost equally obvious that the times we live in present others with strong needs to know predictive and control factors related to behavioral contagion. Because the type of hysteria under discussion is associated with covert causes (fear of pregnancy in young girls often being a prime cause), it is likely that radiation from accidental causes could stimulate panic reactions in large groups. Such accidents have become a genuine factor in our times.8 While neither the popular press nor the professional literature vet reports such outbreaks, it is very possible that public health personnel in the future will have to be aware of prevention, prediction, and control factors as related to epidemic hysteria. A group of people reacting hysterically to a radiation accident (true or rumored) could be extremely dangerous. With their pattern better understood by public health personnel working at the scene of a radiation accident, meaningful reductions in panic could be attained.

## History

A review of the literature concerning epidemic hysteria in the last decade reveals that all but two studies<sup>5,6</sup> have focused on interviewing subjects (and other persons knowledgeable regarding the situation) in the community affected and then searching for causal factors.<sup>3,4,9,10</sup> These latter studies have mainly sought to find the "key" subject, i.e., the person who initiated symptoms. (Earlier studies also concentrated on such aspects of causality; see references 2 and 5 in the paper by Knight, Friedman, and Sulianti.<sup>6</sup>)

Next it has been the style to look into the psychodynamics of this key subject and thence to ascertain how the other subjects became affected. Thus these studies have tended to be concerned principally with monocausal factors and

NOVEMBER, 1967 2009

to be, at least in the main, "psychoanalytic" in their approach. Quotes are used here with the term psychoanalytic to indicate that psychoanalysts have not themselves made field studies of epidemic hysteria. On the other hand, psychoanalysis does seem to basically lend itself to monocausal reasoning about epidemic hysteria.<sup>2</sup>

Until recently there has been little emphasis placed on obtaining epidemiological, psychiatric, psychological, and sociological data in the study of epidemic hysteria. Among others, two studies<sup>7,11</sup> concerning causality stand out. Leighton and Hughes<sup>7</sup> have written about cultural aspects of various group pathologies. Wheeler, Smith, and Murphy<sup>11</sup> have written about their experimentation in behavioral contagion.

A recent sociological study<sup>5</sup> was, according to the writer's review of the literature, the first to obtain sociometric data and the first to include a control group; the data were obtained from the results of a field study.<sup>1</sup> Another recent study<sup>6</sup> was the first to administer individual psychological tests (intelligence, motor, projective) and the first to obtain neurological data; this study also included a control group.

It is the writer's opinion that future research would preferably be organized and carried out by public health agencies, perhaps in cooperation with other agencies and individuals. Such research projects must include control groups and must obtain data from as many sources as possible. The data will be necessary to form a more adequate picture of individual differences and group trends so that etiological factors may be more completely isolated than heretofore.

The emphasis placed here on the search for multicausal etiology stems mainly from the study recently done by Knight, Friedman, and Sulianti.<sup>6</sup> In this study it was suggested that neurological dysfunctioning may play as important a role as functional psychodynamics. Significant differences between victim and

control groups were not found in the above study. The investigation was merely a preliminary attempt to design a well integrated study by a multidisciplinary team.

### Methodological Considerations

The research team should decide upon a plan of investigation before initiation of the field study. This plan should be made prior to the onset of the field study but could, if situations warrant it, be subject to later modifications. Such problems as when and where to interview, test, and examine are of paramount importance. There are, for example, indications that it is advisable to test subjects (victims and controls) after the outbreak has subsided.\* Prior to this time the team may concern itself with:

- (1) interviewing nonaffected persons,
- (2) obtaining socioeconomic data, and
- (3) if possible and feasible, aiding in the reduction of the hysteria.† After the outbreak has terminated, or significantly subsided, the investigators should initiate testing and examining.

Testing which appears to be basic to the study of epidemic hysteria includes: (1) psychological (intelligence, motor, personality); (2) psychiatric (structured diagnostic interview); (3) sociometric; (4) epidemiological; (5) neuro-

<sup>\*</sup>While it may prove more fruitful to investigate outbreaks after they have subsided, it must be up to the individual team to decide when to initiate primary (data-gathering) and secondary (subject-testing) efforts. It must be considered that it is likely that the community affected would be more receptive to outsiders coming in to investigate after the outbreak has subsided; also, better testing conditions would probably present themselves.

<sup>†</sup> From an on-the spot therapeutic viewpoint, a particular outbreak may demand that only observations and indirect data be obtained while those members of the team who are able to, attempt to decrease the potency of the hysteria. This may be done by several means: (1) dispelling fears among nonaffected members of the community; (2) offering discussions related to factual information about group disturbances, e.g., suggestibility, to the public; and (3) giving clinical information about epidemic hysteria to public officials and to local medical, paramedical, and educational personnel.

logical; and (6) electroencephalographic. Investigations will be initiated only after epidemiological tests have demonstrated that what is to be studied is genuinely an epidemic of hysteria.

The research team should include as basic members specialists from the following fields: (1) clinical psychology, (2) epidemiology, (3) psychiatry, (4) social psychology, and (5) sociology. One member of the team should act as organizer. The research plan should be developed by the team as a whole and only modified by the group after discussion.

#### Research Needs

In order to carry out an effective and scientifically based study it is essential that certain basic needs be met. These are: (1) community cooperation, (2) institutional support, and (3) cooperation of local and regional mass media outlets. This is quite important because too much public attention focused on such a research project can end it before it starts or while it is in progress.

Those in the community in which the epidemic takes place must be assured by the investigators that all possible steps will be taken to modify or end the outbreak. Any communication that does not clearly outline this assurance might formulate in the minds of some that the team wants the epidemic to continue so that it can be studied. This idea—the idea of being guinea pigs-unless corrected, can ruin a field study of epidemic hysteria.

Another need is found in situations where the team must travel considerable distances to the scene of the epidemic. In such cases adequate local office space must be available so that the team can test subjects, discuss findings, formulate changes in plans, interview community officials, and so on.

Motivation of those to be studied is also important. It has been the writer's experience that attention must be given to rewards for the victims and controls, e.g., money, time off from school, and so on.

Many—if not most—outbreaks take place in school settings. In such instances it is vital to have all school records made available to the team. Such records reveal data concerning: (1) attendance, (2) grades, (3) standardized test scores, and (4) personality factors. When combined with the testing done by the team, such data can be very important in arriving at conclusions, formulating hypotheses, and comparing the subjects with others who have been studied.

In summary, the writer feels that, with adequate research facilities and a refined research methodology, behavioral scientists may obtain meaningful data in the discovery of etiological factors regarding epidemic hysteria and related group pathologies.

#### REFERENCES

- Champion, F. P., and Taylor, R. Mass Hysteria Associated with Insect Bites. J. South Carolina M. A. 59:351-353, 1963.
- 2. Fenichel, O. The Psychoanalytic Theory of Neurosis.
- New York: Norton, 1945, p. 222.

  3. Harris, Grace. Possession "Hysteria" in a Kenya
- Tribe. Am. Anthrop. 59:1046-1066, 1957.

  Jacobs, N. The Phantom Slasher of Taipei: Mass
  Hysteria in a Non-Western Society. Soc. Problems 12:318-328, 1965.
- 5. Kerchoff, A. C.; Back, K. W.; and Miller, N. Sociometric Patterns in Hysterical Contagion. Sociometry 28:2-15, 1965.
- 6. Knight, J. A.; Friedman, T. I.; and Sulianti, Julie. Epidemic Hysteria: A Field Study. A.J.F.H. 55,6: 858-865, 1965.
- 7. Leighton, A. H., and Hughes, Jane. "Cultures as Causative of Mental Disorders." In: Causes of Mental Disorders: A Review of Epidemiological Knowledge. New York: Milbank Memorial Fund,
- 8. Longood, R. J. Radiation Accidents-The Public's Right to Know. A.J.P.H. 56,10:1751-1755, 1966.
- Rankin, A. M., and Philip, P. J. An Epidemic of Laughing. Central African J. M. 9:167-170, 1963.
   Taylor, F., and Hunter, R. C. A. Observations of a Hysterical Epidemic in a Hospital Ward. Psychi-
- atric Quart. 52:821-839, 1958.

  11. Wheeler, L.: Smith, S.: and Murphy, D. B. Behavioral Contagion. Psychol. Reports 15:159-173,

Mr. Friedman is school psychologist, Lake Park High School, Medinah, Ill. This paper was submitted for publication in August, 1966.